Service Schematics

NOKIA 3500 classic

Introduction

Important:

This document is intended for use by authorized service centers only.

RM-272 / RM-273

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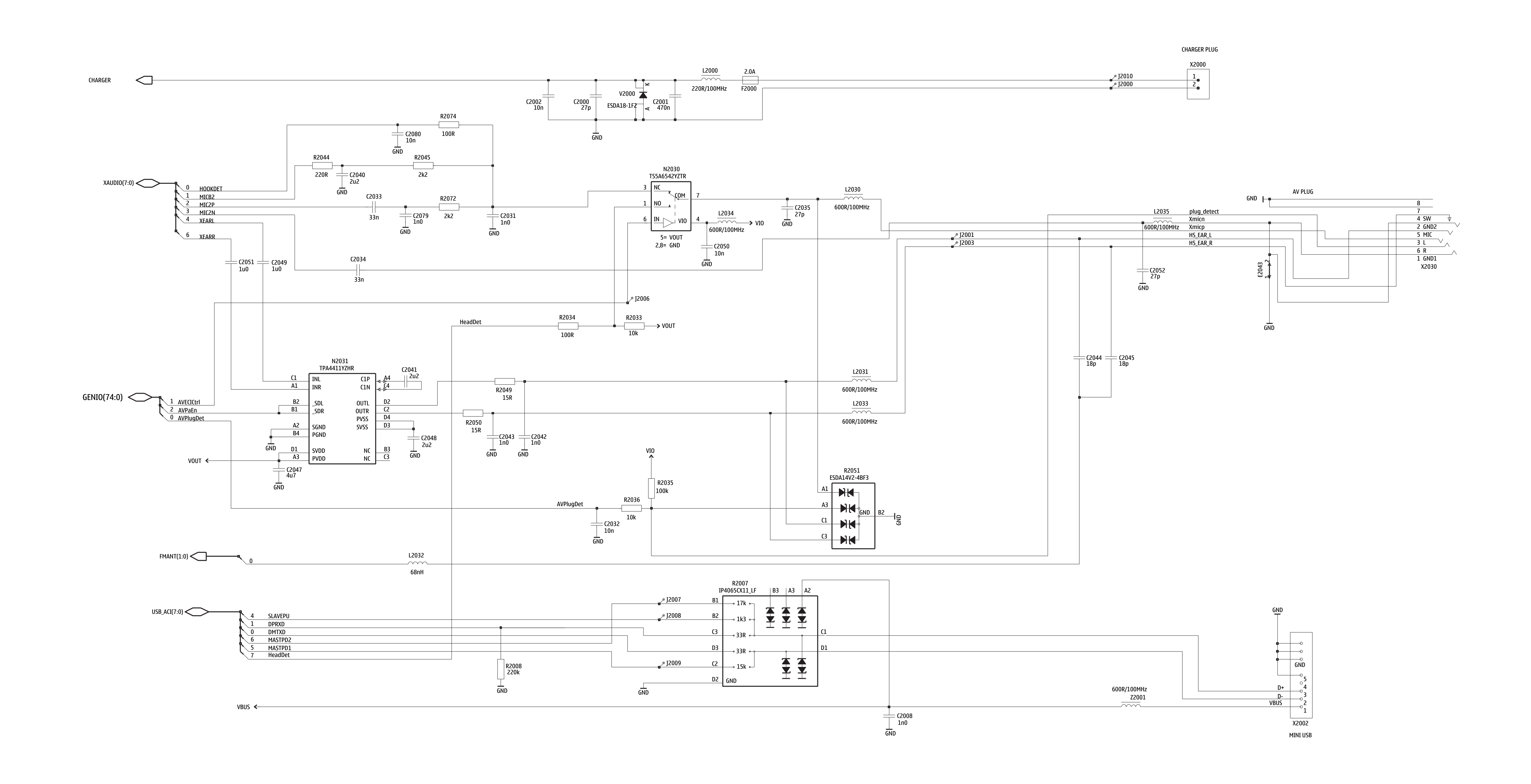
“Service Schematics“ was created with focus on customer care.
The purpose of this document is to provide further technical repair information for NOKIA mobile phones on Level 3/4 service activities.
It contains additional information such as e.g. “Component finder”.

Saving process time and improving the repair quality is the aim of this document.
It is to be used additionaly to the service manual and other training or service information such as Service Bulletins.

While every endeavour has been made to ensure the accuracy of this document, some errors may exist. If the reader finds any errors, NOKIA should be notified in writing.

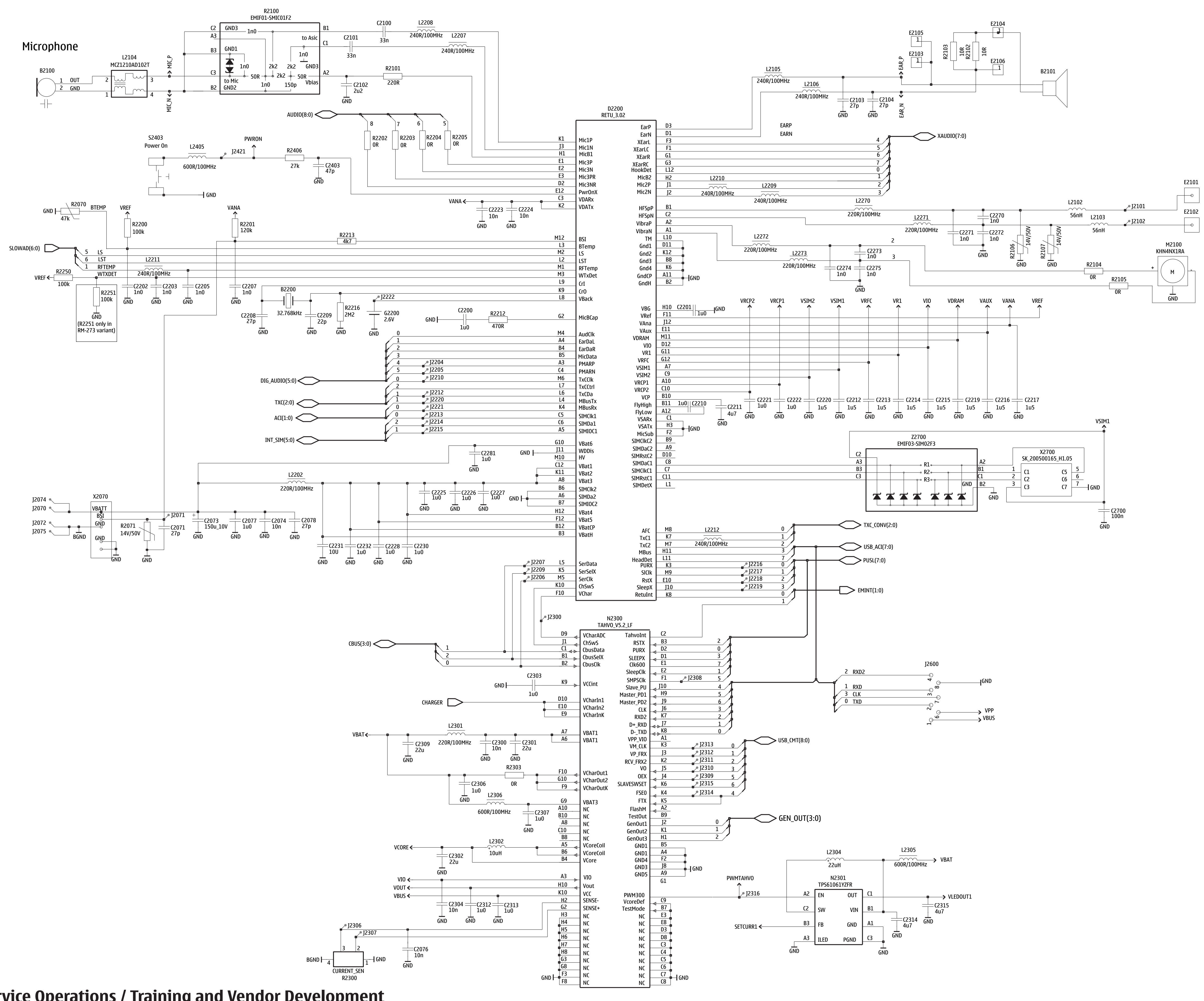
Please send E-Mail to: TrainingAndVendor.Development@nokia.com



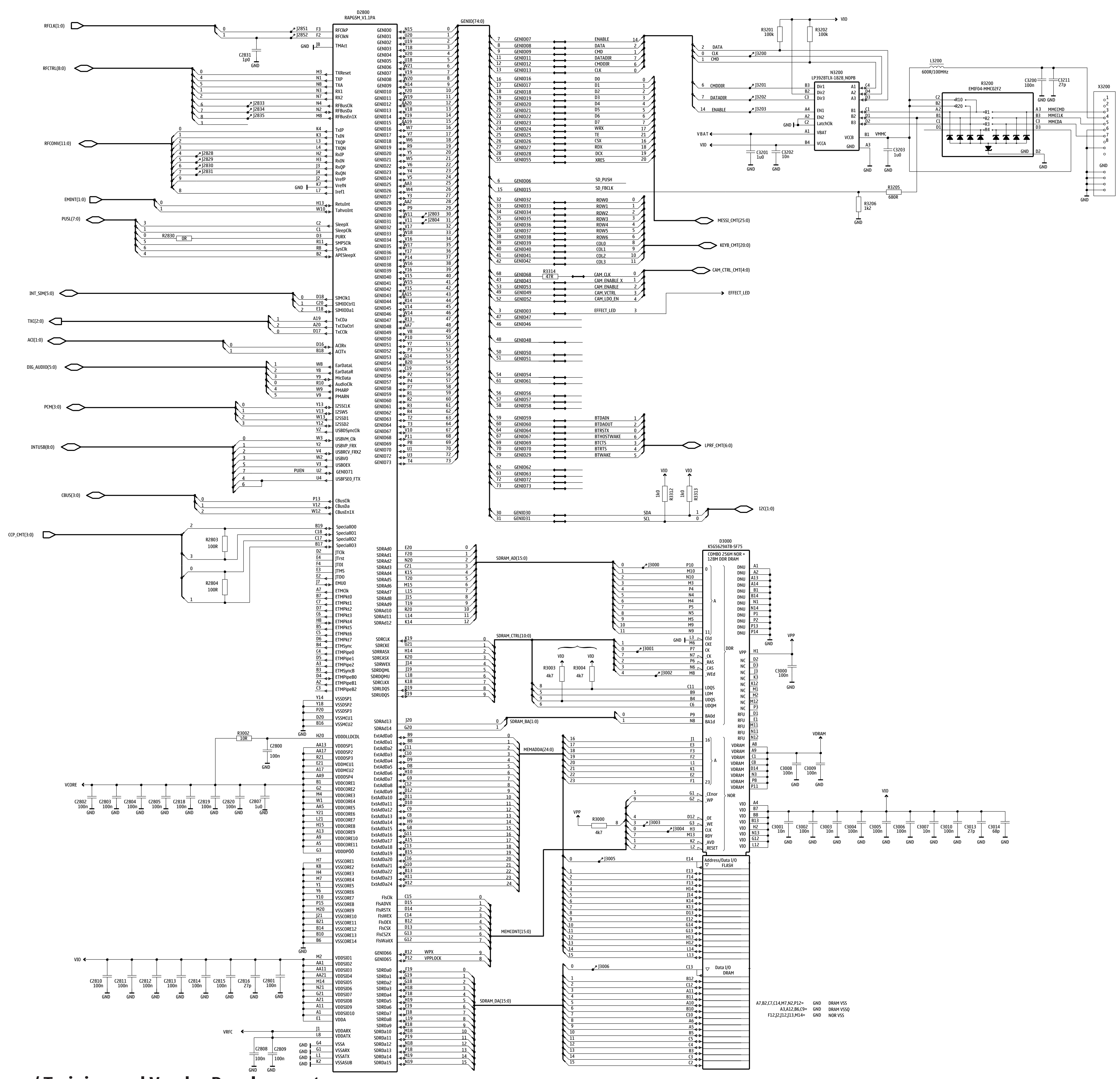


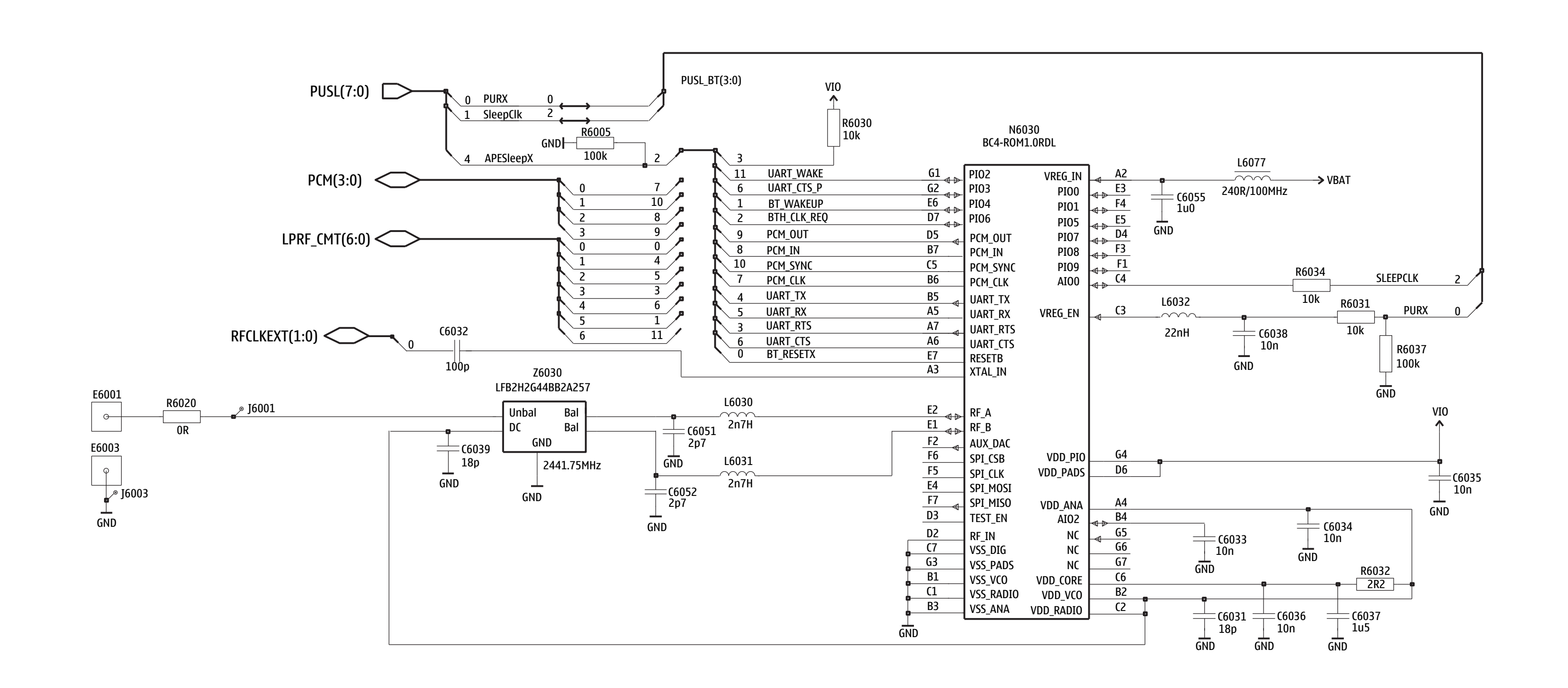
Customer Care / Service Operations / Training and Vendor Development

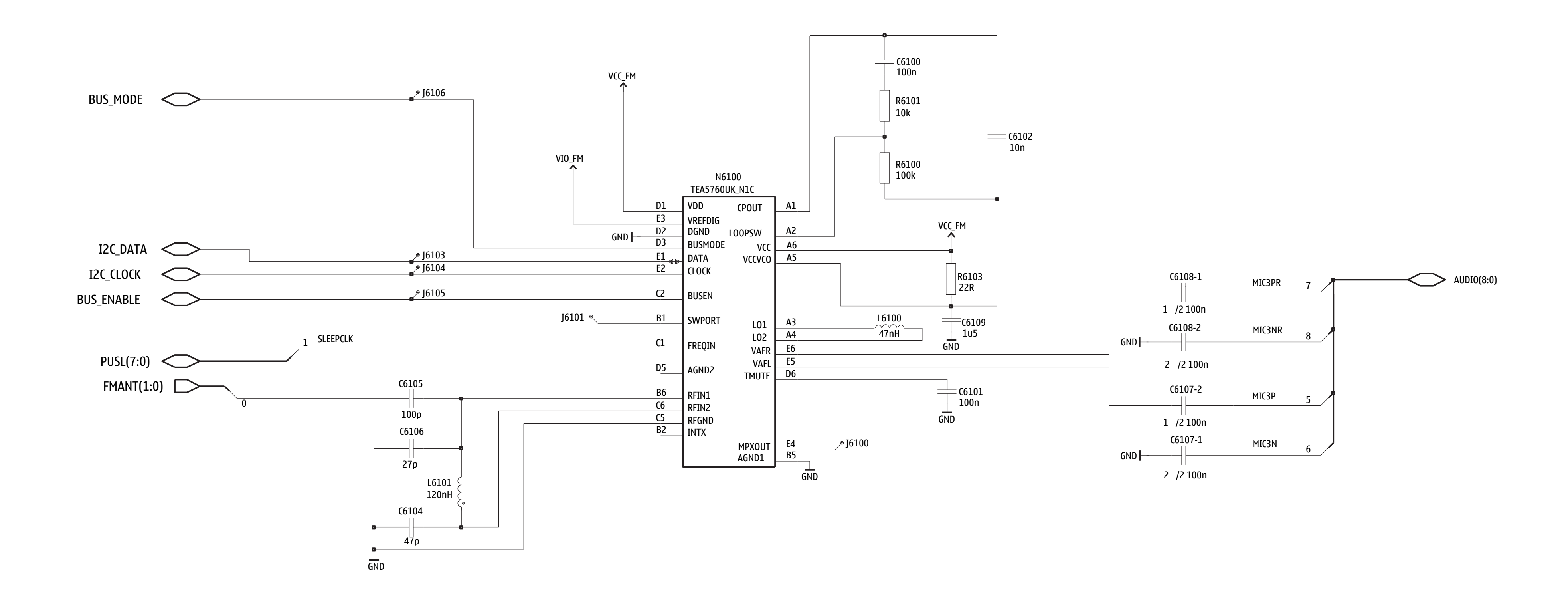
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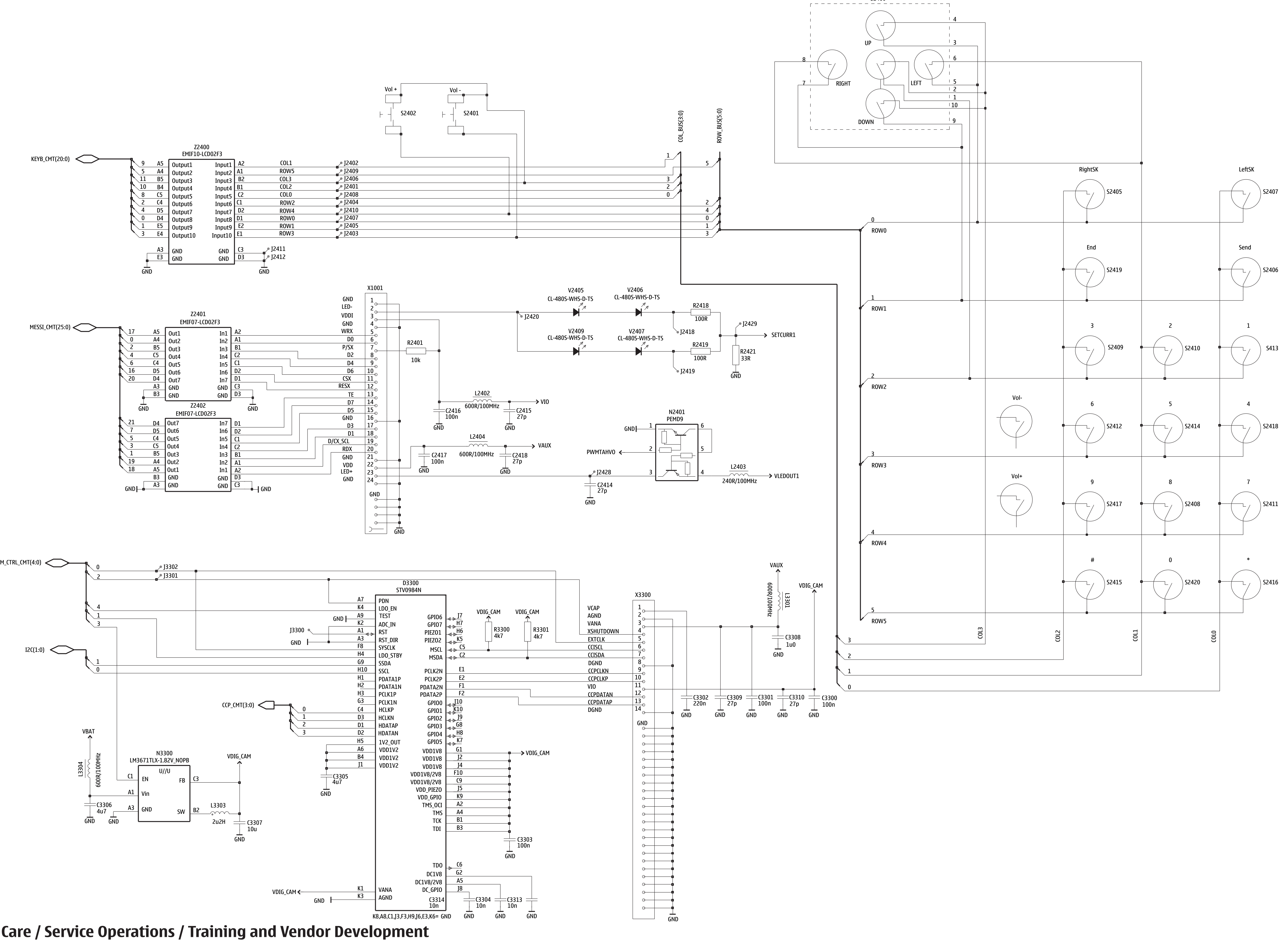


Microphone
B2100
L2104
MCZ1210AD102T
R2100
EMIF01-SMIC01F2
to Asic
to Mic
C2100
L2208
L2207
240R/100MHz
C2101
C2102
R2101
220R
L2105
L2106
C2103
C2104
E2105
E2104
E2103
E2106
R2103
R2102
B2101
AUDIO(8:0)
R2202
R2203
R2204
R2205
D2200
RETU_3.02
S2403
Power On
L2405
600R/100MHz
J2421
PWRON
R2406
C2403
XAUDIO(7:0)
L2210
L2209
L2270
L2271
L2272
L2273
L2102
L2103
E2101
E2102
J2101
J2102
M2100
KHN4NX1RA
R2104
R2105
VANA
C2223
C2224
R2070
BTEMP
VREF
R2200
R2201
R2213
SLOWAD(6:0)
L2211
R2250
R2251
(R2251 only in RM-273 variant)
B2200
32.768kHz
R2216
G2200
C2200
R2212
C2201
VBG
VREF
VSIM1
VSIM2
VRCP1
VRCP2
VRFC
VR1
VIO
VDRAM
VAUX
DIG_AUDIO(5:0)
TXC(2:0)
ACI(1:0)
INT_SIM(5:0)
Z2700
EMIF03-SIM02F3
X2700
SK_200500165_H1.05
C2700
J2074
J2070
J2072
J2075
X2070
R2071
L2202
220R/100MHz
TXC_CONV(2:0)
USB_ACI(7:0)
PUSL(7:0)
EMINT(1:0)
L2212
N2300
TAHVO_V5.2_LF
CBUS(3:0)
J2300
J2600
RXD2
RXD
CLK
TXD
VPP
VBUS
CHARGER
VBAT
L2301
R2303
L2306
USB_CMT(8:0)
GEN_OUT(3:0)
VCORE
L2302
VIO
VOUT
VBUS
L2304
L2305
N2301
TPS61061YZFR
PWMTAHVO
SETCURR1
VLEDOUT1
CURRENT_SEN
R2300

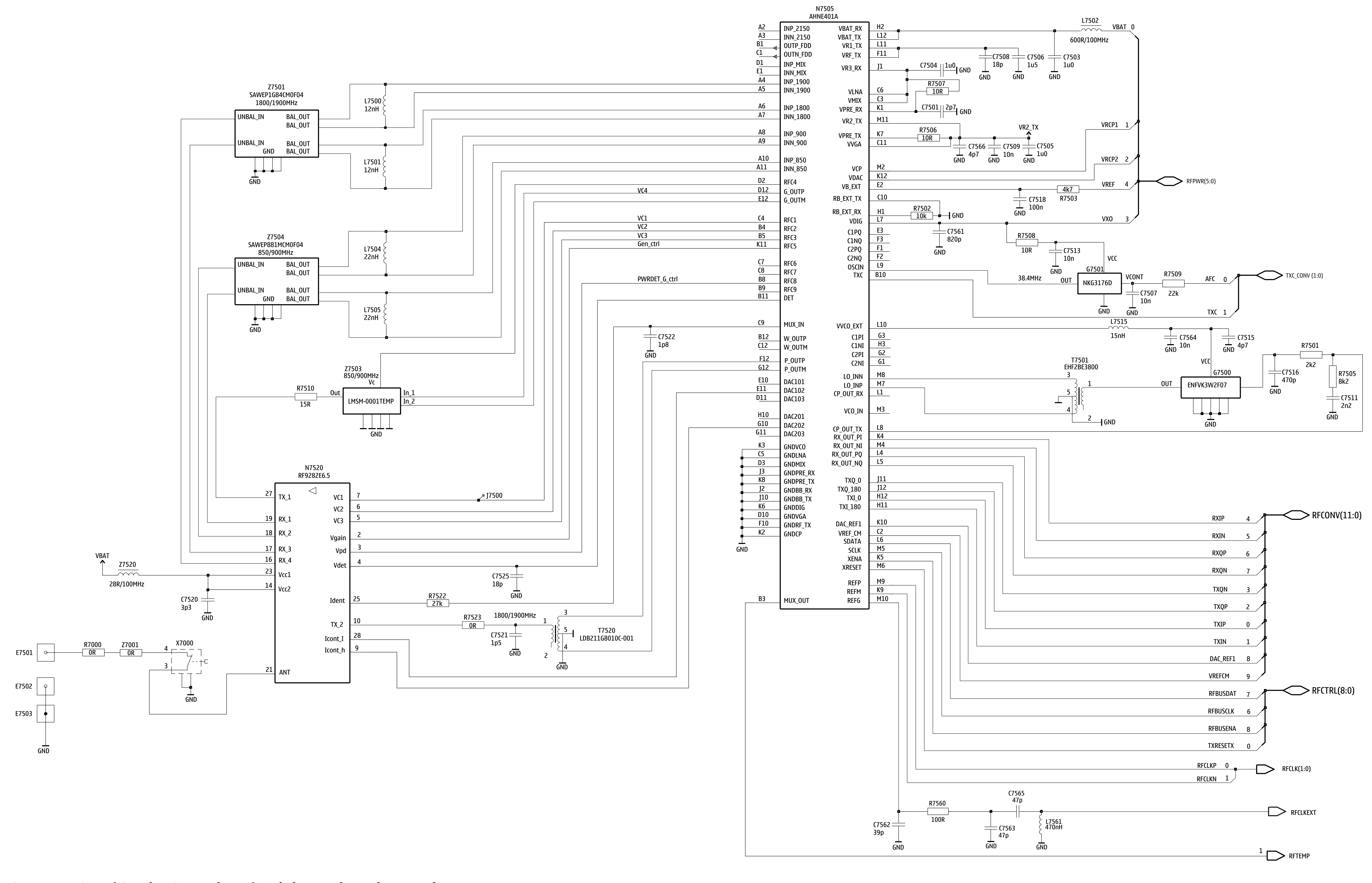


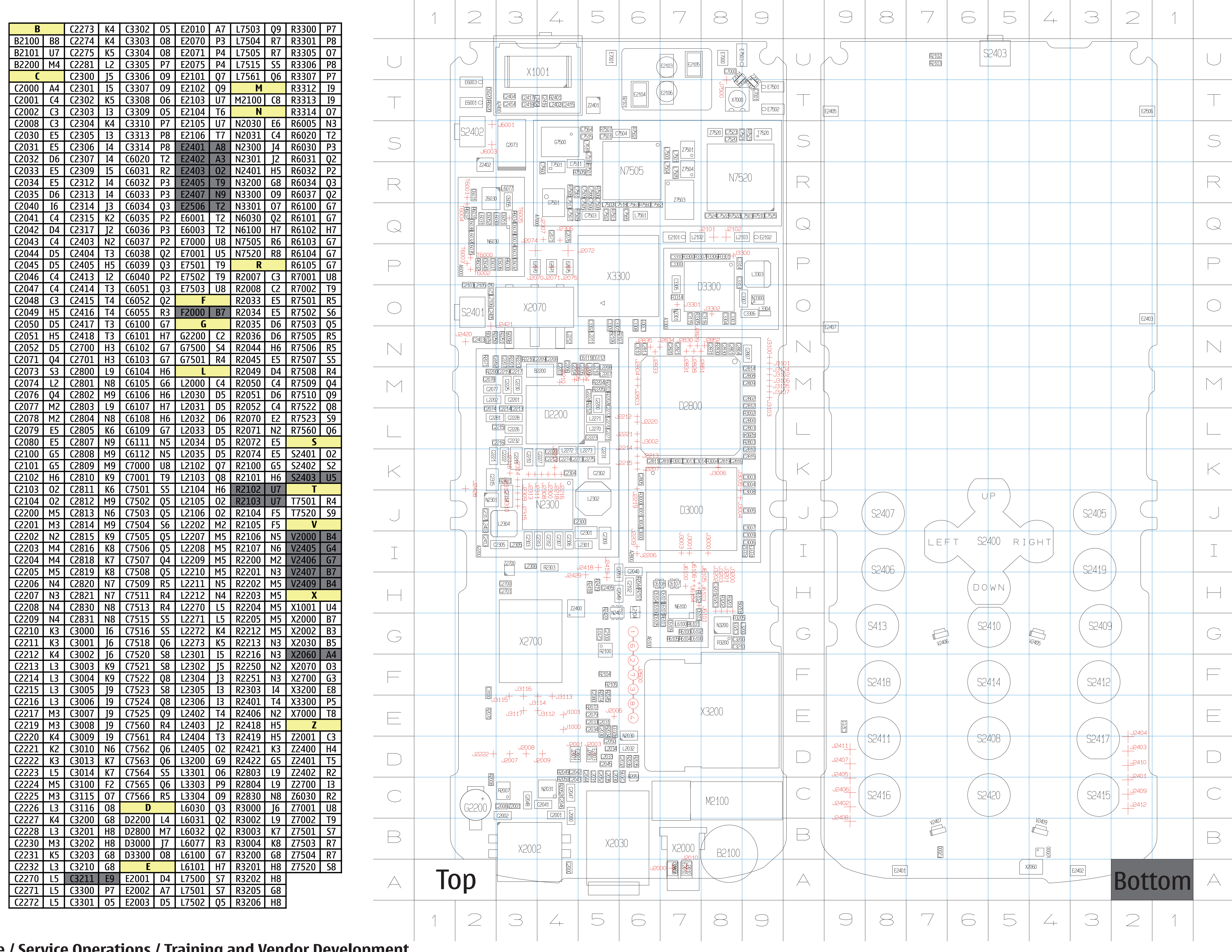

PUSL(7:0)
PCM(3:0)
LPRF_CMT(6:0)
RFCLKEXT(1:0)
PUSL_BT(3:0)
PURX
SleepClk
APESleepX
R6005
100k
VIO
R6030
10k
N6030
BC4-ROM1.0RDL
UART_WAKE
UART_CTS_P
BT_WAKEUP
BTH_CLK_REQ
PCM_OUT
PCM_IN
PCM_SYNC
PCM_CLK
UART_TX
UART_RX
UART_RTS
UART_CTS
BT_RESETX
PIO2
PIO3
PIO4
PIO6
PCM_OUT
PCM_IN
PCM_SYNC
PCM_CLK
UART_TX
UART_RX
UART_RTS
UART_CTS
RESETB
XTAL_IN
RF_A
RF_B
AUX_DAC
SPI_CSB
SPI_CLK
SPI_MOSI
SPI_MISO
TEST_EN
RF_IN
VSS_DIG
VSS_PADS
VSS_VCO
VSS_RADIO
VSS_ANA
VREG_IN
PIO0
PIO1
PIO5
PIO7
PIO8
PIO9
AIO0
VREG_EN
VDD_PIO
VDD_PADS
VDD_ANA
AIO2
NC
VDD_CORE
VDD_VCO
VDD_RADIO
L6077
240R/100MHz
VBAT
C6055
1u0
R6034
10k
SLEEPCLK
R6031
10k
PURX
L6032
22nH
C6038
10n
R6037
100k
C6035
10n
C6033
10n
C6034
10n
R6032
2R2
C6031
18p
C6036
10n
C6037
1u5
C6032
100p
Z6030
LFB2H2G44BB2A257
Unbal
Bal
DC
GND
2441.75MHz
E6001
R6020
0R
J6001
E6003
J6003
C6039
18p
L6030
2n7H
C6051
2p7
L6031
2n7H
C6052
2p7
GND


BUS_MODE
J6106
VCC_FM
VIO_FM
N6100
TEA5760UK_N1C
VDD
VREFDIG
DGND
BUSMODE
DATA
CLOCK
BUSEN
SWPORT
FREQIN
AGND2
RFIN1
RFIN2
RFGND
INTX
CPOUT
LOOPSW
VCC
VCCVCO
LO1
LO2
VAFR
VAFL
TMUTE
MPXOUT
AGND1
I2C_DATA
I2C_CLOCK
BUS_ENABLE
J6103
J6104
J6105
J6101
PUSL(7:0)
SLEEPCLK
FMANT(1:0)
C6105
100p
C6106
27p
L6101
120nH
C6104
47p
C6100
100n
R6101
10k
R6100
100k
C6102
10n
R6103
22R
L6100
47nH
C6109
1u5
C6101
100n
J6100
AUDIO(8:0)
C6108-1
MIC3PR
C6108-2
MIC3NR
C6107-2
MIC3P
C6107-1
MIC3N
GND



S2400
UP
RIGHT
LEFT
DOWN
Vol +
Vol -
S2402
S2401
COL_BUS(3:0)
ROW_BUS(5:0)
KEYB_CMT(20:0)
Z2400
EMIF10-LCD02F3
COL1
ROW5
COL3
COL2
COL0
ROW2
ROW4
ROW0
ROW1
ROW3
J2402
J2409
J2406
J2401
J2408
J2404
J2410
J2407
J2405
J2403
J2411
J2412
GND
MESSI_CMT(25:0)
Z2401
EMIF07-LCD02F3
Z2402
EMIF07-LCD02F3
X1001
LED-
VDDI
WRX
D0
P/SX
D2
D4
D6
CSX
RESX
TE
D7
D5
D3
D1
D/CX_SCL
RDX
VDD
LED+
R2401
10k
V2405
CL-480S-WHS-D-TS
V2406
CL-480S-WHS-D-TS
V2409
CL-480S-WHS-D-TS
V2407
CL-480S-WHS-D-TS
J2420
R2418
100R
J2418
R2419
100R
J2419
J2429
SETCURR1
R2421
33R
L2402
600R/100MHz
VIO
C2416
100n
C2415
27p
L2404
600R/100MHz
VAUX
C2417
100n
C2418
27p
N2401
PEMD9
PWMTAHVO
J2428
C2414
27p
L2403
240R/100MHz
VLEDOUT1
RightSK
S2405
LeftSK
S2407
End
S2419
Send
S2406
S2409
S2410
S413
S2412
S2414
S2418
Vol-
Vol+
S2417
S2408
S2411
S2415
S2420
S2416
CAM_CTRL_CMT(4:0)
J3302
J3301
D3300
STV0984N
PDN
LDO_EN
TEST
ADC_IN
RST
RST_DIR
SYSCLK
LDO_STBY
SSDA
SSCL
PDATA1P
PDATA1N
PCLK1P
PCLK1N
HCLKP
HCLKN
HDATAP
HDATAN
1V2_OUT
VDD1V2
GPIO6
GPIO7
PIEZO1
PIEZO2
MSCL
MSDA
PCLK2N
PCLK2P
PDATA2N
PDATA2P
GPIO0
GPIO1
GPIO2
GPIO3
GPIO4
GPIO5
VDD1V8
VDD1V8/2V8
VDD_PIEZO
VDD_GPIO
TMS_OCI
TMS
TCK
TDI
TDO
DC1V8
DC1V8/2V8
DC_GPIO
VANA
AGND
J3300
I2C(1:0)
CCP_CMT(3:0)
C3305
4u7
VDIG_CAM
R3300
4k7
R3301
4k7
C3303
100n
C3304
10n
C3313
10n
C3314
10n
K8,A8,C1,J3,F3,H9,J6,E3,K6= GND
X3300
VCAP
AGND
VANA
XSHUTDOWN
EXTCLK
CCISCL
CCISDA
DGND
CCPCLKN
CCPCLKP
VIO
CCPDATAN
CCPDATAP
L3301
600R/100MHz
C3308
1u0
C3302
220n
C3309
27p
C3301
100n
C3310
27p
C3300
100n
VBAT
L3304
600R/100MHz
N3300
LM3671TLX-1.82V_NOPB
U/U
EN
Vin
FB
SW
C3306
4u7
L3303
2u2H
C3307
10u


N7505
AHNE401A
INP_2150
INN_2150
OUTP_FDD
OUTN_FDD
INP_MIX
INN_MIX
INP_1900
INN_1900
INP_1800
INN_1800
INP_900
INN_900
INP_850
INN_850
RFC4
G_OUTP
G_OUTM
RFC1
RFC2
RFC3
RFC5
RFC6
RFC7
RFC8
RFC9
DET
MUX_IN
W_OUTP
W_OUTM
P_OUTP
P_OUTM
DAC101
DAC102
DAC103
DAC201
DAC202
DAC203
GNDVCO
GNDLNA
GNDMIX
GNDPRE_RX
GNDPRE_TX
GNDBB_RX
GNDBB_TX
GNDDIG
GNDVGA
GNDRF_TX
GNDCP
MUX_OUT
VBAT_RX
VBAT_TX
VR1_TX
VRF_TX
VR3_RX
VLNA
VMIX
VPRE_RX
VR2_TX
VPRE_TX
VVGA
VCP
VDAC
VB_EXT
RB_EXT_TX
RB_EXT_RX
VDIG
C1PQ
C1NQ
C2PQ
C2NQ
OSCIN
TXC
VVCO_EXT
C1PI
C1NI
C2PI
C2NI
LO_INN
LO_INP
CP_OUT_RX
VCO_IN
CP_OUT_TX
RX_OUT_PI
RX_OUT_NI
RX_OUT_PQ
RX_OUT_NQ
TXQ_0
TXQ_180
TXI_0
TXI_180
DAC_REF1
VREF_CM
SDATA
SCLK
XENA
XRESET
REFP
REFM
REFG
Z7501
SAWEP1G84CM0F04
1800/1900MHz
UNBAL_IN
BAL_OUT
GND
L7500
12nH
L7501
12nH
Z7504
SAWEP881MCM0F04
850/900MHz
L7504
22nH
L7505
22nH
Z7503
850/900MHz
LMSM-0001TEMP
R7510
15R
N7520
RF9282E6.5
TX_1
RX_1
RX_2
RX_3
RX_4
Vcc1
Vcc2
ANT
VC1
VC2
VC3
Vgain
Vpd
Vdet
Ident
TX_2
Icont_I
Icont_h
VC4
PWRDET_G_ctrl
Gen_ctrl
J7500
C7522
1p8
C7525
18p
R7522
27k
R7523
0R
1800/1900MHz
C7521
1p5
T7520
LDB211G8010C-001
VBAT
Z7520
28R/100MHz
C7520
3p3
E7501
E7502
E7503
R7000
0R
Z7001
0R
X7000
L7502
600R/100MHz
VBAT
C7508
18p
C7506
1u5
C7503
1u0
C7504
1u0
R7507
10R
C7501
2p7
R7506
10R
C7566
4p7
C7509
10n
C7505
1u0
VRCP1
VRCP2
VREF
VXO
RFPWR(5:0)
R7503
4k7
C7518
100n
R7502
10k
C7561
820p
R7508
10R
C7513
10n
VCC
G7501
NKG3176D
38.4MHz
OUT
VCONT
C7507
10n
R7509
22k
AFC
TXC
TXC_CONV (1:0)
L7515
15nH
C7564
10n
C7515
4p7
T7501
EHF2BE3800
G7500
ENFVK3W2F07
C7516
470p
R7501
2k2
R7505
8k2
C7511
2n2
RXIP
RXIN
RXQP
RXQN
TXQN
TXQP
TXIP
TXIN
DAC_REF1
VREFCM
RFCONV(11:0)
RFBUSDAT
RFBUSCLK
RFBUSENA
TXRESETX
RFCTRL(8:0)
RFCLKP
RFCLKN
RFCLK(1:0)
R7560
100R
C7565
47p
C7562
39p
C7563
47p
L7561
470nH
RFCLKEXT
RFTEMP



B		C2273	K4	C3302	O5	E2010	A7	L7503	Q9	R3300	P7
B2100	B8	C2274	K4	C3303	O8	E2070	P3	L7504	R7	R3301	P8
B2101	U7	C2275	K5	C3304	O8	E2071	P4	L7505	R7	R3305	O7
B2200	M4	C2281	L2	C3305	P7	E2075	P4	L7515	S5	R3306	P8
C		C2300	J5	C3306	O9	E2101	Q7	L7561	Q6	R3307	P7
C2000	A4	C2301	I5	C3307	O9	E2102	Q9	M		R3312	I9
C2001	C4	C2302	K5	C3308	O6	E2103	U7	M2100	C8	R3313	I9
C2002	C3	C2303	I3	C3309	O5	E2104	T6	N		R3314	O7
C2008	C3	C2304	K4	C3310	P7	E2105	U7	N2030	E6	R6005	N3
C2030	E5	C2305	I3	C3313	P8	E2106	T7	N2031	C4	R6020	T2
C2031	E5	C2306	I4	C3314	P8	E2401	A8	N2300	J4	R6030	P3
C2032	D6	C2307	I4	C6020	T2	E2402	A3	N2301	J2	R6031	Q2
C2033	E5	C2309	I5	C6031	R2	E2403	O2	N2401	H5	R6032	P2
C2034	E5	C2312	I4	C6032	P3	E2405	T9	N3200	G8	R6034	Q3
C2035	D6	C2313	I4	C6033	P3	E2407	N9	N3300	O9	R6037	Q2
C2040	I6	C2314	J3	C6034	Q3	E2506	T2	N3301	O7	R6100	G7
C2041	C4	C2315	K2	C6035	P2	E6001	T2	N6030	Q2	R6101	G7
C2042	D4	C2317	J2	C6036	P3	E6003	T2	N6100	H7	R6102	H7
C2043	C4	C2403	N2	C6037	P2	E7000	U8	N7505	R6	R6103	G7
C2044	D5	C2404	T3	C6038	Q2	E7001	U5	N7520	R8	R6104	G7
C2045	D5	C2405	H5	C6039	Q3	E7501	T9	R		R6105	G7
C2046	C4	C2413	I2	C6040	P2	E7502	T9	R2007	C3	R7001	U8
C2047	C4	C2414	T3	C6051	Q3	E7503	U8	R2008	C2	R7002	T9
C2048	C3	C2415	T4	C6052	Q2	F		R2033	E5	R7501	R5
C2049	H5	C2416	T4	C6055	R3	F2000	B7	R2034	E5	R7502	S6
C2050	D5	C2417	T3	C6100	G7	G		R2035	D6	R7503	Q5
C2051	H5	C2418	T3	C6101	H7	G2200	C2	R2036	D6	R7505	R5
C2052	D5	C2700	H3	C6102	G7	G7500	S4	R2044	H6	R7506	R5
C2071	Q4	C2701	H3	C6103	G7	G7501	R4	R2045	E5	R7507	S5
C2073	S3	C2800	L9	C6104	H6	L		R2049	D4	R7508	R4
C2074	L2	C2801	N8	C6105	G6	L2000	C4	R2050	C4	R7509	Q4
C2076	Q4	C2802	M9	C6106	H6	L2030	D5	R2051	D6	R7510	Q9
C2077	M2	C2803	L9	C6107	H7	L2031	D5	R2052	C4	R7522	Q8
C2078	M2	C2804	N8	C6108	H6	L2032	D6	R2070	E2	R7523	S9
C2079	E5	C2805	K6	C6109	G7	L2033	D5	R2071	N2	R7560	Q6
C2080	E5	C2807	N9	C6111	N5	L2034	D5	R2072	E5	S	
C2100	G5	C2808	M9	C6112	N5	L2035	D5	R2074	E5	S2401	O2
C2101	G5	C2809	M9	C7000	U8	L2102	Q7	R2100	G5	S2402	S2
C2102	H6	C2810	K9	C7001	T9	L2103	Q8	R2101	H6	S2403	U5
C2103	O2	C2811	K6	C7501	S5	L2104	H6	R2102	U7	T	
C2104	O2	C2812	M9	C7502	Q5	L2105	O2	R2103	U7	T7501	R4
C2200	M5	C2813	N6	C7503	Q5	L2106	O2	R2104	F5	T7520	S9
C2201	M3	C2814	M9	C7504	S6	L2202	M2	R2105	F5	V	
C2202	N2	C2815	K9	C7505	Q5	L2207	M5	R2106	N5	V2000	B4
C2203	M4	C2816	K8	C7506	Q5	L2208	M5	R2107	N6	V2405	G4
C2204	M4	C2818	K7	C7507	Q4	L2209	M5	R2200	M2	V2406	G7
C2205	M5	C2819	K8	C7508	Q5	L2210	M5	R2201	N3	V2407	B7
C2206	N4	C2820	N7	C7509	R5	L2211	N5	R2202	M5	V2409	B4
C2207	N3	C2821	N7	C7511	R4	L2212	N4	R2203	M5	X	
C2208	N4	C2830	N8	C7513	R4	L2270	L5	R2204	M5	X1001	U4
C2209	N4	C2831	N8	C7515	S5	L2271	L5	R2205	M5	X2000	B7
C2210	K3	C3000	I6	C7516	S5	L2272	K4	R2212	M5	X2002	B3
C2211	K3	C3001	J6	C7518	Q6	L2273	K5	R2213	N3	X2030	B5
C2212	K4	C3002	J6	C7520	S8	L2301	I5	R2216	N3	X2060	A4
C2213	L3	C3003	K9	C7521	S8	L2302	J5	R2250	N2	X2070	O3
C2214	L3	C3004	K9	C7522	Q8	L2304	J3	R2251	N3	X2700	G3
C2215	L3	C3005	J9	C7523	S8	L2305	I3	R2303	I4	X3200	E8
C2216	L3	C3006	I9	C7524	Q8	L2306	I3	R2401	T4	X3300	P5
C2217	M3	C3007	J9	C7525	Q9	L2402	T4	R2406	N2	X7000	T8
C2219	M3	C3008	J9	C7560	R4	L2403	J2	R2418	H5	Z	
C2220	K4	C3009	I9	C7561	R4	L2404	T3	R2419	H5	Z2001	C3
C2221	K2	C3010	N6	C7562	Q6	L2405	O2	R2421	K3	Z2400	H4
C2222	K3	C3013	K7	C7563	Q6	L3200	G9	R2422	G5	Z2401	T5
C2223	L5	C3014	K7	C7564	S5	L3301	O6	R2803	L9	Z2402	R2
C2224	M5	C3100	F2	C7565	Q6	L3303	P9	R2804	L9	Z2700	I3
C2225	M3	C3115	O7	C7566	R5	L3304	O9	R2830	N8	Z6030	R2
C2226	L3	C3116	O8	D		L6030	Q3	R3000	J6	Z7001	U8
C2227	K4	C3200	G8	D2200	L4	L6031	Q2	R3002	L9	Z7002	T9
C2228	L3	C3201	H8	D2800	M7	L6032	Q2	R3003	K7	Z7501	S7
C2230	M3	C3202	H8	D3000	J7	L6077	R3	R3004	K8	Z7503	R7
C2231	K5	C3203	G8	D3300	O8	L6100	G7	R3200	G8	Z7504	R7
C2232	L3	C3210	G8	E		L6101	H7	R3201	H8	Z7520	S8
C2270	L5	C3211	E9	E2001	D4	L7500	S7	R3202	H8		
C2271	L5	C3300	P7	E2002	A7	L7501	S7	R3205	G8		
C2272	L5	C3301	O5	E2003	D5	L7502	Q5	R3206	H8		